physicians, and particularly endocrinologists and pediatricians, concerned over the short stature of their children.

In many cases, these children are technically within the normal range for height (taller than the 3rd percentile for age). Even in these children, however, and particularly in those well below the 2 standard deviations of height for age, short stature is a major psychosocial problem in childhood. This results in many similar problems in adult life. Physicians caring for these children need to take the perceived problem seriously and to arrive at a diagnosis as expeditiously as possible by a combination of family history, careful serial growth measurements and, in some cases, hormonal and radiologic investigations.

The diagnostic approach presented in the accompanying article is extremely useful. By following this or a similar diagnostic schema, physicians should develop a straightforward approach to the diagnosis of cases of short stature. Particularly important is the quick separation of those who are essentially normal (normal short stature or constitutional delay) from those who have pathologic causes of their short stature. This avoids unnecessary testing of children who are essentially normal, while leading to a definitive diagnosis in those who have definable syndromes. Recent work in the use of synthetic growth hormone in cases of Turner's syndrome[2] gives hope that this type of treatment may be useful in a number of specific disorders.

The question remains open as to whether some children who are otherwise normal except for their short stature might respond to therapeutic doses of growth hormone. Small-scale studies suggest that at least short-term increases in growth rate may be achieved in some cases by therapeutic administration of growth hormone.[3,4] It is important to stress, however, that no one has shown any long-term benefit of growth hormone treatment for any of this group of children. Because synthetic growth hormone treatment remains relatively untried and expensive (an average of $15,000 per year at present prices and dosages), prudent physicians should remain cautious and skeptical until large-scale controlled studies are done. In the meantime, it is important to provide reassurance and counseling to those children and their parents who are essentially normal and can well expect to achieve adult stature within the normal range. These patients should neither be ignored nor subjected to the indiscriminate use of synthetic hormone in an attempt to create an Orwellian world where human variation is discouraged and eliminated.

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Group Think

A NUMBER of events in the news bring to mind the concept of "group think" which Irving Janis, a recently retired professor at Yale University and now an adjunct professor at the University of California at Berkeley, has put forth for more than a decade.

In group think, loyalty to the group requires that the members of the group ignore important, even crucial, information that conflicts with a collective group view with which most of the group are comfortable. Group think can have serious untoward consequences. A classic example, often cited, is the failure of American automakers to understand and respond to the public demand for smaller, higher quality, fuel efficient cars that grew out of the oil shortages in the 1970s. The American automakers were more comfortable building large cars and failed to take into account data they did not want to hear about and which made them uncomfortable as a group. Foreign automakers did listen, were not uncomfortable as a group (indeed quite the opposite) and moved rapidly into a hungry American market. In fact they are still here. There are many other examples where groups that have an intrinsic, almost blind, loyalty within themselves have failed to take into any serious account disturbing information that would challenge the decisions reached through undisturbed group think.

To this writer, group think appears to be a very widespread and real phenomenon by no means limited to automakers. Wherever it affects leaders and decision makers, whether in business, government, health care or anywhere else, unnecessary and costly mistakes can occur, and too often do. In times such as these, the group think phenomenon deserves much more attention than it seems to be receiving.

MSMW

Diagnosing Intussusception

IN 1979 Dr Nyhan and his group presented six cases of infants and children with intussusception.[1] In four of these patients, the clinical presentation followed the classic triad of intermittent colicky abdominal pain, vomiting and bloody, mucoid (currant-jelly) stool. In two additional infants, the clinical presentation was "atypical," characterized by profound lethargy, apathy and prostration suggesting shock or sepsis, or there was crying and arching of the back to suggest a central nervous system process such as meningitis or encephalitis. In this issue, Dr Nyhan's group has reviewed five additional patients with intussusception having unique clinical presentations. They emphasize once again that intussusception may mimic acute central nervous system disease, prompting diagnostic studies such as lumbar puncture and computed tomographic scans of the head.

It is refreshing to note that Dr Nyhan reviewed these patients in a residents' conference, and, from the symptoms and physical findings, they elicited from the participants a list of differential diagnoses. This exercise in stressing diagnostic possibilities based on clinical features should be emphasized as much in current times as it was in previous eras when elegant diagnostic facilities were not so readily available. Laboratory tests and diagnostic imaging studies make medical practice far easier today, but the waste in time, labor and cost is appalling when a history and physical examination would suffice. We in medicine must return to the discipline of being clinicians, wherein we focus our thinking based on symptoms and signs and develop confidence in our course of action. We should condemn the "shotgun" batteries of tests that prevail in medical teaching centers today. There can be little justifica-

tion in carrying out the entire litany of diagnostic studies, beginning with plain x-ray films, followed by ultrasound, computed tomographic scan, magnetic resonance imaging scan and, finally, angiography, to evaluate a given disease process. By the same token, the indication for endoscopy is not an orifice. We must justify the performance and the expense of studies to which we submit our patients. We should ask ourselves, "Is a diagnostic study necessary in the management of this problem, and which study will be most efficacious in clarifying the problem?"

In intussusception, the "classic" clinical features of colicky pain, vomiting, currant-jelly stools and abdominal mass, in combination, occur in less than half the patients.[2-4] Of the isolated symptoms, pain is not a prominent presentation in 10% to 20% of infants, vomiting is not described in 10% to 20%, rectal bleeding (currant-jelly stool or bright red blood) may not be noted in 40% to 85% and an abdominal mass has not been found in 15% to 75% of the various retrospective reviews reported. These variations in the data cited are, in part, a function of the individual characteristics of a child and the duration of intussusception, but they also reflect the clinical skill of the observer in taking the time and patience to elicit these findings.

The current case selection identified a group of patients who present with profound lethargy, somnolence or even semicoma—as a manifestation of pain. This phenomenon occurs not only with intussusception, but any entity causing severe pain (appendicitis, peritonitis, bowel obstruction, postoperative status) may produce profound central nervous system depression. Coma was the presenting symptom of pain in an infant with glaucoma.[5] This phenomenon is presumably related to the release of endorphins and enkephalins. The result is similar to that in a patient who has been heavily sedated with an opiate. In other words, clinicians must realize that the obtundation, somnolence, withdrawal, lethargy and even coma should be interpreted as pain in the same manner as a conspicuous complaint, such as crying out or an agonized expression. This is not a rare phenomenon in the young or in the aged. Intussusception is not uncommon within the first few days following a thoracotomy or laparotomy in infants, and the only manifestation is "ileus" persisting longer than expected in an otherwise quiet, subdued, model patient. There is documentation of endorphin release following stress in all ages, but in the extremes of age, the response may be one of profound narcosis.

Recognition that lethargy, withdrawal, somnolence and semicoma equal pain may indicate that there is a role for using narcotic antagonists to facilitate our being able to identify these manifestations as pain.[6] Naloxone and similar opiate antagonists may produce sudden awakening and responses which we usually accept as more appropriate to pain. In other words, opiate antagonists might help differentiate obtundation due to pain-induced endorphin release from a true central nervous system depression. Soon thereafter, however, administration of a narcotic for pain relief is important when further procedures are to be done.

Finally, when there is any question about the diagnosis of intussusception, the most cost-effective and therapeutic maneuver is the contrast enema. In this issue, Dr Nyhan's group has emphasized the importance of indications and technique for using a contrast enema to diagnose an intussusception. The success for hydrostatic reduction varies with different centers, from 19% to 80%. Once again, technique and patience are necessary to achieve success. The transport to the fluoroscopy room and the manipulations required to give the enema will arouse the most subdued infant or child. The success in reducing an intussusception is greatest when the patient is not straining or resisting. Pain and discomfort are a necessary part of the procedure, and, therefore, these patients should be properly sedated beforehand. Some have suggested that enema reduction of an intussusception is contraindicated if the symptoms have been present for two or more days, if there is evidence of bowel obstruction or if the patient is 4 years or older. We believe the only contraindication to enema reduction is the presence of signs of peritonitis or the recurrence of an intussusception in a child older than 2 years. A recurrence in an older patient suggests there is a leading point (Meckel's diverticulum, intestinal duplication, polyp or lymphoma) which requires surgical treatment.

To avoid perforation, the enema reduction must be accomplished with the barium cannister raised no higher than 1 m (3 ft 6 in) above the patient, and the abdominal contents must not be massaged. Whether constant steady pressure is used or whether several enemas are administered intermittently is a matter of choice. The success seems to be greater when constant, steady pressure is applied. Failure to progressively reduce the intussusception from a given point in the colon after a 10-minute trial is sufficient to abandon the procedure and proceed to the operating room. If the intussuscipiens is reduced from the cecum but the contrast cannot be refluxed into the small bowel, surgical exploration and completion of the reduction is necessary. Glucagon, 0.05 mg per kg given intravenously (an intravenous infusion of 5% dextrose in Ringer's lactate solution is always started before the attempted reduction), is said to relax the bowel and enhance the reduction. It is difficult to establish objective evidence of glucagon's efficacy without a large, interinstitutional survey with control cases. Intussusception recurs in about 2% of patients whether reduction was accomplished by enema or by operation.

We are indebted to Dr Nyhan's group for keeping us aware of the many extraordinary clinical presentations, which really are not atypical, of intussusception. The earlier we recognize the presence of intussusception, the more successful will be enema reduction and the lower the morbidity.

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